

Accepted Manuscript

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Maren Kasischke, Stella Maragkaki, Sergej Volz, Andreas Ostendorf, Evgeny L. Gurevich

PII: S0169-4332(18)30756-6
DOI: <https://doi.org/10.1016/j.apsusc.2018.03.086>
Reference: APSUSC 38834

To appear in: *Applied Surface Science*

Received Date: 30 December 2017

Accepted Date: 10 March 2018

Please cite this article as: M. Kasischke, S. Maragkaki, S. Volz, A. Ostendorf, E.L. Gurevich, Simultaneous nanopatterning and reduction of graphene oxide by femtosecond laser pulses, *Applied Surface Science* (2018), doi: <https://doi.org/10.1016/j.apsusc.2018.03.086>

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Simultaneous nanopatterning and reduction of graphene oxide by femtosecond laser pulses

Maren Kasischke

*Applied Laser Technologies, Ruhr-Universität Bochum, Universitätsstraße 150, 44801
Bochum, Germany*

Stella Maragkaki

*Applied Laser Technologies, Ruhr-Universität Bochum, Universitätsstraße 150, 44801
Bochum, Germany*

Sergej Volz

*Applied Laser Technologies, Ruhr-Universität Bochum, Universitätsstraße 150, 44801
Bochum, Germany*

Andreas Ostendorf

*Applied Laser Technologies, Ruhr-Universität Bochum, Universitätsstraße 150, 44801
Bochum, Germany*

Evgeny L. Gurevich

*Applied Laser Technologies, Ruhr-Universität Bochum, Universitätsstraße 150, 44801
Bochum, Germany*

Abstract

This paper presents a novel one-step method for the periodical nanopatterning and reduction of graphene oxide (GO). Self-organized periodic structures of reduced graphene oxide (rGO) appear on GO surfaces upon processing with a femtosecond laser at fluences slightly higher than the fluence needed for reduction of the GO. This indicates that the periodic pattern is formed either *simultaneously with* or *due to* the reduction of the GO. The

Email addresses: kasischke@lat.rub.de (Maren Kasischke),
gurevich@lat.rub.de (Evgeny L. Gurevich)

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